Application No.: 10/766,843

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of managing quality of service in a mobile radio

network in which protocols for communication over terrestrial interfaces comprise a radio

network layer and a transport network layer and wherein quality of service management includes

quality of service management linked to the radio network layer and quality of service

management linked to the transport network layer, said method comprising:

a step in which a first network element signals to a second network element, by means of

the radio network layer signaling protocol, at least one parameter representative of transport

quality of service or of quality of service for the transport network layer, and

a step in which the second network element uses said at least one parameter for transport

quality of service management for uplink transmission over an Iub interface between a

controlling radio network controller and a Node B, or for uplink transmission over an Iur

interface between a serving radio network controller and a drift radio network controller and/or

downlink transmission over an Iub interface between a drift radio network controller and a Node

<u>B</u>.

2. (Original) A method according to claim 1, wherein said first network element is a

controlling radio network controller.

3

Application No.: 10/766,843

3. (Original) A method according to claim 2, wherein said second network element

is a Node B or a base station.

4. (previously presented): A method according to either claim 2, wherein said radio

network layer signaling protocol is a Node B Application Part protocol applicable to the Iub

interface between the controlling radio network controller and the Node B.

5. (canceled).

6. (Original) A method according to claim 1, wherein said first network element is a

serving radio network controller.

7. (Original) A method according to claim 6, wherein said second network element

is a drift radio network controller.

8. (previously presented): A method according to claim 6, wherein said radio

network layer signaling protocol is a Radio Network Subsystem Application Part signaling

protocol applicable to the Iur interface between the serving radio network controller and the drift

radio network controller.

9. (canceled).

4

Application No.: 10/766,843

10. (previously presented): A method according to claim 1, wherein said at least one parameter representative of transport quality of service is a specific parameter intended to indicate a transport quality of service level.

- 11. (currently amended): A method according to claim 1, wherein said at least one parameter representative of transport quality of service is at least one radio access bearer parameter that may also be used as a transport quality of service parameter.
- 12. (currently amended): A method according to claim 11, wherein said at least one radio access bearer parameter that may also be used as a transport quality of service parameter is the transfer delay.
- 13. (currently amended): A method according to claim 11, wherein said at least one radio access bearer parameter that may also be used as a transport quality of service parameter is the traffic handling priority.
- 14. (currently amended): A method according to claim 11, wherein said at least one radio access bearer parameter that may also be used as a transport quality of service parameter is the traffic class.
- 15. (currently amended): A method according to claim 11, wherein said at least one radio access bearer parameter that may also be used as a transport quality of service parameter is

Application No.: 10/766,843

copied or translated from the RANAP protocol to the NBAP protocol, respectively or from the RANAP protocol to the RNSAP protocol.

16. (currently amended): A method according to claim 1, wherein said at least one parameter representative of transport quality of service is at least one parameter that may be associated with a transport quality of service level or at least one radio access bearer parameter that may also be used as a transport quality of service parameter.

- 17. (currently amended): A method according to claim 16, wherein said at least one parameter that may be associated with a transport quality of service level or at least one radio access bearer parameter that may also be used as a transport quality of service parameter is a time adjustment parameter, the lowest values of said parameter being assigned to connections having the highest higher transfer delay and/or traffic handling priority constraints and the highest higher values of said parameter being assigned to connections having the highest higher transfer delay and/or traffic handling priority constraints.
- 18. (currently amended): A method according to claim 17, wherein said time adjustment parameter is the time of arrival window start parameter.
- 19. (currently amended): A method according to claim 16, wherein said at least one parameter that may be associated with a level of transport quality of service or at least one radio access bearer parameter that may also be used as a transport quality of service parameter includes at least one parameter representative of the number of dedicated channels allocated to a

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/766,843

priority constraints.

connection, a high number of dedicated channels being allocated to connections having high transfer delay and/or traffic handling priority constraints and a lower number of dedicated channels being allocated to connections having lower transfer delay and/or traffic handling

Attorney Docket No.: 079623

- 20. (currently amended): A network element comprising means for implementing a method according to claim 1 radio network controller CRNC comprising means for signalling to a Node B in accordance with a signalling protocol of a radio network layer corresponding to the NBAP protocol applicable to the Iub interface between the radio network controller CRNC and Node B at least one parameter representing the quality of service for the transport network layer, for uplink transmission over the Iub interface between the controlling radio network controller CRNC and the Node B.
- 21. (currently amended): A network element according to claim 20, in the form of a controlling radio network controller The radio network controller according to claim 20, further comprising means for signalling said at least one parameter in a "Radio link set-up request" message.
- 22. (currently amended): A network element according to claim 20, in the form of a serving The radio network controller according to claim 20, wherein said at least one parameter is a specific parameter intended to indicate a transport QoS level.

Application No.: 10/766,843

drift A radio network controller SRNC comprising means for signalling to a radio network controller DRNC by means of a signalling protocol of a radio network layer corresponding to the RNSAP applicable to the Iur interface between radio network controller SRNC and radio network controller DRNC at least one parameter representing the quality of service for the transport network layer, for uplink transmission over the Iur interface between the serving radio network controller SRNC and the drift radio network controller DRNC and downlink transmission over an Iub interface between the drift radio network controller DRNC and a Node B.

- 24. (currently amended): A network element according to claim 20, in the form of a Node B The radio network controller according to claim 23, further comprising means for signalling said at least one parameter in a "Radio link set-up request" message.
- 25. (New) A radio network controller according to claim 23, wherein said at least one parameter is a specific parameter intended to indicate a transport QoS level.
- 26. (New) A radio network controller according to claim 24, wherein said at least one parameter is a specific parameter intended to indicate a transport QoS level.
  - 27. (New) A radio network controller DRNC comprising:

means for receiving from a radio network controller SRNC by means of a signalling protocol of a radio network layer corresponding to the RNSAP protocol applicable to the Iur

Application No.: 10/766,843

interface between radio network controller SRNC and radio network controller DRNC at least one parameter representing the quality of service for the transport network layer,

means for using said at least one parameter for transport quality of service management for the transmission in the uplink direction over the Iur interface between radio network controller SRNC and radio network controller DRNC and in the downlink direction over the Iub interface between radio network controller DRNC and Node B.

- 28. (New) The radio network controller according to claim 27, further comprising means for receiving said at least one parameter in a "Radio link set-up request message".
- 29. (New) The radio network controller according to claim 27, wherein said at least one parameter corresponds to a specific parameter intended to indicate a transport QoS level.
- 30. (New) The radio network controller according to claim 28, wherein said at least one parameter corresponds to a specific parameter intended to indicate a transport QoS level.
- 31. (New) A Node B comprising means for receiving from a radio network controller CRNC in accordance with a signalling protocol of a radio network layer corresponding to the NBAP protocol applicable to the Iub interface between radio network controller CRNC and Node B at least one parameter representing the quality of service for the transport network layer and means for using said at least one parameter for managing the transport quality of service for transmission in the uplink direction over the Iub interface between the radio network controller CRNC and Node B.

Application No.: 10/766,843

32. (New) The Node B according to claim 31, including means for receiving said at least one parameter in a "Radio link set-up request" message.

- 33. (New) The Node B according to claim 31, wherein said at least one parameter corresponds to a specific parameter intended to indicate a transport QoS level.
- 34. (New) The Node B according to claim 32, wherein said at least one parameter corresponds to a specific parameter intended to indicate a transport QoS level.